Discrete Applied Mathematics
Combinatorial Algorithms, Optimization and Computer Science

Guide for Authors

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- Postscript Articles: Short updates to previously published articles in Discrete Applied Mathematics. See section below for more details on this kind of article.

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Each paper should be introduced by three to five keywords and a selfcontained abstract of no more than 100 words, not counting the formulas.

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References should be listed alphabetically, as in the following examples: books [1], articles in journals [2], papers in a contributed volume [3,4], unpublished papers [5].

[1] E. Borger, Computability, Complexity, Logic, North-Holland, Amsterdam, 1989.
[2] D.E. Knuth, Theory and Practice, Theoret. Comput. Sci. 90 (1991) 1–15.
[3] A.K. Lenstra, H.W. Lenstra, Jr., Algorithms in number theory, in: J. vanLeeuwen (ed.), Handbook of Computer Science, Vol. A, Elsevier, Amsterdam, 1990, pp. 673–715.
[4] M. Li, Lower bounds by Kolmogorov complexity, in: Proc. ICALP '85, Lecture Notes in Computer Science, Vol. 194, Springer, Berlin, 1985, pp. 383–393.
[5] A. Rajasekar, Semantics for logic programs, Ph.D. Thesis, Department of Computer Science, University of Maryland, 1989.

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To submit their work, authors are requested:

- To mail three hard copies of the manuscript to Publications Office, RUTCOR, Rutgers, The State University of New Jersey, 640 Bartholomew Road, Piscataway, NJ 08854-8003, USA, mentioning "Mathematical Software Section" in their covering letter and
- To send the codes electronically to Professors S. Martello and P. Toth at **smartello@deis.unibo.it/ptoth@deis.unibo.it**

Only source codes are considered. Accepted languages are FORTRAN and C. The codes must strictly conform to the ANSI 77 Standard FORTRAN and to the ANSI C Standard, respectively.

The codes must be clean, well documented and self contained. Use of machine-dependent constants and functions should be avoided or, when needed, clearly stated. Each code must contain a main subroutine or procedure which receives all the

input data and yields all the output data as parameters. Such a routine must begin with a comments section providing:

- clear description of the domain of applicability
- meaning of each input and/or output parameter
- list of machine dependent constants and functions
- list of the routines composing the codes
- type of structure of all the parameters
- rules for the arrays dimensioning
- meaning of the main interval variables

Indentation is recommended for loops and if-then-else statements. The labels in each routine should be consecutive with constant step. Examples of well-structured codes can be found in Martello and Toth, "Knapsack Problems: Algorithms and Computer Implementations", Wiley, 1990.

Each code must be accompanied by a driver program which:

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- calls the main routine of the code
- prints out the results on a standard unit. (The comments section of the driver program must provide the expected output.)

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